

Veronica islensis Gamal-Eldin n. sp. from Wadi Isla, Southern Sinai

by

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Abstract:

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A new species of *Veronica* from Sinai is described and compared with *V. kaiseri*, which seems to be the nearest relative.

Wadi Isla is situated in the southern part of Sinai Peninsula, 30 km of El-Tor city. It is an isolated, narrow and irregular wadi. It originates west of El-Tor City runs between magmatic mountains and ends in El-Qa valley. The El-Qa valley, between the magmatic massif of lower Sinai Massif District and the Gulf of Suez (DANIN, 1983), represents an extremely arid area which is very poor in species. In contrast, Wadi Isla is characterized by the presence of a distinct, long spring-water canal. It contains water throughout the year.

It seems that this wadi has not been thoroughly investigated. There are only few specimens which have been cited by ABDALLAH et al. (1984) and EL-NAGGAR (1989) from this wadi. Among those collectors who visited Wadi Isla, are: KHATTAB (1926); SHABETAI (1937); HASSIB (1940) and ABDALLAH (1962) to be mentioned.

Recently, in September 1990, the author has got the opportunity to visit Wadi Isla, as a member of the research team of a project for Development of St. Catherine Desert Training Centre. The identification of the collected material during this trip lead to the discovery of a new *Veronica* species which is presented in this work.

DANIN et al. (1985) recorded three *Veronica* species from Sinai Peninsula. These are *V. anagallis-aquatica* L., *V. campylopoda* Boiss. and *V. rubrifolia* Boiss. subsp. *respectatissima* M.A. Fischer. In addition a fourth species *V. kaiseri* Täckh. has been described from Sheikh Umm Hussun Shideg in southern Sinai. It represents an endemic species restricted to the granite massif of the southern Sinai. Similar finding have been reported by EL-HUSSEINI A ZAREH (1989).

Veronica anagallis-aquatica L. grows near fresh water springs. *V. campylopoda* Boiss. can be found on stony slopes and in gardens. The latter species has been recently, in April 1991, collected by the author from an irrigated garden in Wadi El-Arbain. *V. rubrifolia* Boiss. subsp. *respectatissima* M.A. Fischer grows on stony slopes, also in Southern Sinai. It was seen and

collected by E. GAMAL-ELDIN and S. HENEIDIK from the E slope of Gabel Catherine. These three species are quite distinct from the new species.

The author studied the type specimen of *Veronica kaiseri* Täckh. present in CAI Herbarium, which was formerly named as *V. velenovsky* L. Uechtr. This specimen has been collected by A. KAISER in the year 1926.

In an effort to identify our material from wadi Isla with the key given by CHRTEK and OSBORNOVA-KOSINOVA (1981), we came to *V. anagalloides* subsp. *taeckholmiorum*. This subspecies is a common weed in fields in N. Cairo, Benha, Nile bank, Cairo-El-Merg, in the Nile Delta and is also distinct from the new species.

Veronica anagalloides is distinguished by the oblong calyx lobes, long lanceolate leaves and the whitish and violet veined corolla. However *Veronica anagalloides* subsp. *taeckholmiorum* is characterized by the white veined petals (not violet veined).

***Veronica islensis* Gamal-Eldin, sp. nov. (sect. *Beccabunga* (Hill) Dumort.)**

Plantae 5-7 cm altae, rectae, glabrae. Folia inferiora breviter petiolata; folia media sessilia, 9 mm longa, 4 mm lata, ovalia, margine integra, apice acuta. Inflorescentiae oppositae, 2.5-3.5 cm longae, laxae, erectae. Flores minuti; corolla dilute violacea. Calyx 2.5-2.8 mm longus, lobis ellipticis, acutis. Fructus 3 mm longus, 2 mm latus, ellipticus, calyce paulo longior; pedicelli 4-5 mm longi, breviter sparse glandulosi; bracteae usque 1.2 mm longae, pedicellis saepe breviores, in parte superiore arcuatae.

Typus: Egypt, Sinai Peninsula: Wadi Isla; in fresh water canal, 1.10.1990, *Gamal-Eldin* (Herb. Suez Canal University).

Annual, 5-7 cm high, glabrous, not branched from the base; stem erect. Lower leaves attenuate into a short petiole, median and upper leaves ca. 9 mm long and 4 mm broad, opposite, sessile, entire. Racemes axillary, opposite, 2.5-3.5 cm long, loosely few-flowered. Bracts small, 1.2 mm long, lanceolate, shorter than pedicel. Fruit pedicels 4-5 mm long, clearly curved upwards at tip, sparsely glandular-pubescent. Flowers small; calyx-lobes elliptic, 2.5-2.8 mm long, acute; corolla pale violet, slightly exceeding the calyx. Capsule 3 mm long, 2 mm broad, ovoid, pointed, shortly longer than calyx, not glandular. Seeds ca. 10 in each locule, minute, ovate. Fl. August-September.

This delicate, beautiful little annual is confined to fresh water canals in Wadi Isla. The ovate, sessile median and upper leaves, the pale violet flowers with incurved pedicels at the tip, capsule longer than calyx-lobes and the few flowered and loose racemes distinguish it from the related species, especially from *V. anagalloides* var. *taeckholmiorum* and *V. kaiseri*, both also recorded from Sinai Peninsula.

	<i>V. islensis</i>	<i>V. kaiseri</i>
Median leaves	9 mm long, 4 mm wide ovate, acute	20-30 mm long, 20-25 mm wide ± orbicular, short pointed
Upper leaves	sessile	short petiolated
Raceme	opposite	alternate
Calyx-lobes	shorter than capsule	as long as or longer than capsule
Corolla	pale violet	bright blue
Fruit-pedicel	curved at tip	not curved

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References

- ABDALLAH, M., SAAD, F., EWEIDA, E. & MAHMOUD, M., 1984: Materials from CAIM Herbarium. II. Flora of Sinai Peninsula. - Notes A.R.C. Egypt, 6: 15-214.
- CHRTEK & OSBORNOVA-KOSINOVA, 1981: Veronica sect. Beccabunga in Egypt. - Folia Geobot. Phytotax. 16: 423-437.
- DANIN, A., 1983: Desert vegetation of Israel and Sinai. - Jerusalem.
- DANIN, A., SHMIDA, A., & LISTON, A., 1985: Contributions to the flora of Sinai III: Checklist of the species collected and recorded by the Jerusalem team. 1967-1982. - Willdenowia 15: 253-322.
- EL-HUSSEINI, N. & ZAREH, M., 1989: Annotated List of the Flora of Sinai (Egypt), 7. Angiospermae: Primulaceae- Plantaginaceae. - Teackholmia 12: 55-68.
- EL-HAGGAR, S., 1989: Annotated list of the Flora of Sinai (Egypt), 3. Angiospermae: Papaveraceae - Moringaceae. - Taeckholmia 12: 17-24.
- TÄCKHOLM, V. 1974: Student's Flora of Egypt (ed. 2). - Cairo.

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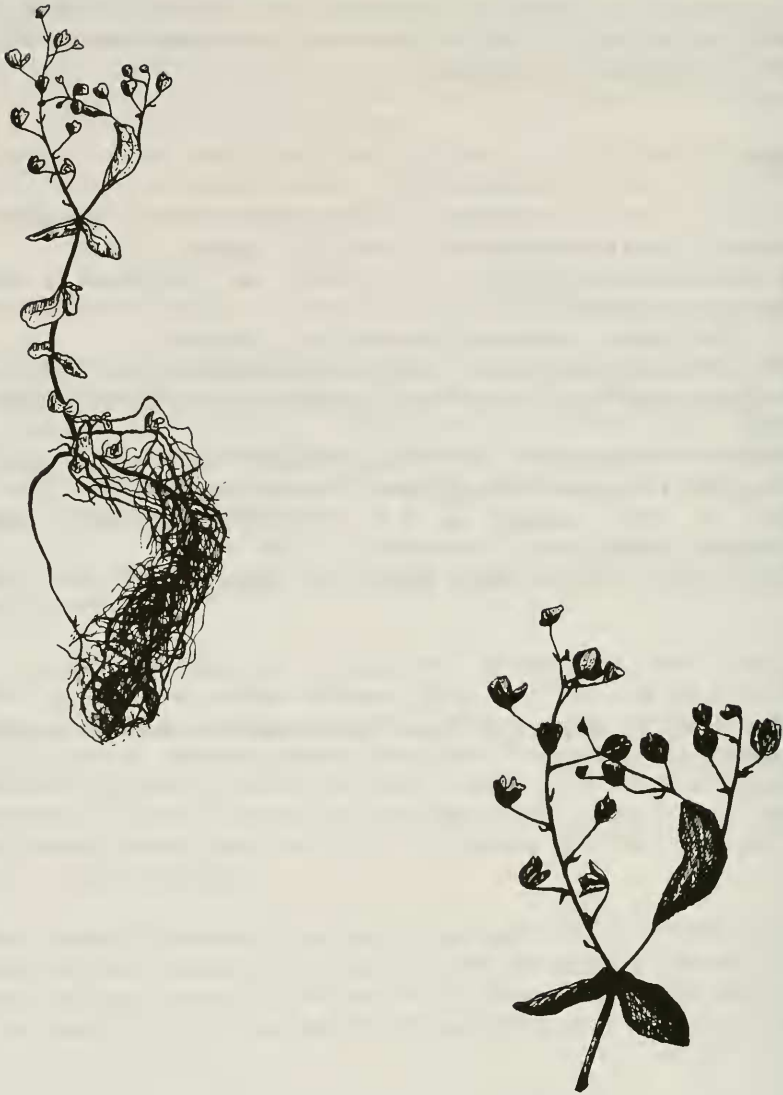


Fig. 1. *Veronica islensis*, habit and inflorescence